



18. The year 1789 (when the French Revolution started) has three and no more than three adjacent digits (7, 8 and 9) which are consecutive integers in increasing order. How many years between 1000 and 9999 have this property?

A 130

B 142

C 151

D 169

E 180

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18. A There are 9 years of the form 123n as n may be any digit other than 4. Similarly, there are 9 years each of the forms 234n, 345n, 456n, 567n and 678n, but 10 years of the form 789n as, in this case, n may be any digit. There are also 9 years of the form n012 and 9 of the form n123, as in both cases n may be any digit other than 0. However, there are 8 years of the form n234 as in this case n cannot be 0 or 1. Similarly, there are 8 years each of the forms n345, n456, n567, n678 and n789.

So the total numbers of years is $1 \times 10 + 8 \times 9 + 6 \times 8 = 130$.